Emergency Support Function – No. 12 ENERGY

Primary Agency:

State Corporation Commission

VERT ESF Branch:

Infrastructure Support Branch

Support Agencies:

- Department of Mines, Minerals and Energy
- Virginia Department of Emergency Management
- Virginia Information Technologies Agency
- Dominion Virginia Power Company
- Virginia Electric Cooperatives

Introduction

Purpose

Emergency Support Function (ESF) #12 – Energy is intended to promote restoration of damaged energy systems and components during a potential or actual incident. ESF #12 is an integral part of the larger role of the State Corporation Commission (SCC) that has the responsibility of maintaining continuous and reliable energy supplies throughout the Commonwealth of Virginia through preventive measures as well as restorative actions.

Scope

ESF #12 collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas. The term "energy" includes producing, refining, transporting, generating, transmitting, conserving, building, distributing, and maintaining energy systems and system components. Additionally, ESF #12 provides information concerning the energy restoration process such as projected schedules, percent completion of restoration, geographic information on the restoration, and other information as appropriate.

The energy industry and this ESF have four sectors: natural gas, electric power, petroleum fuels and solid fuels (coal). The emergency

plans for each energy sector are included in this annex.

Mission

The mission of ESF #12 is to detail the duties and responsibilities of Commonwealth agencies and outline the concept of operations to be used in responding to an energy emergency such as an extended power outage or gasoline shortage.

The primary responsibilities of the nominated agencies and departments of the Commonwealth in such an event are:

- A. To coordinate with local government and relief organizations to assist individuals and families whose health and safety are threatened by the event;
- B. To direct and control state-level emergency operations on behalf of the Governor; and
- C. To keep the public informed about the ongoing situation. The private sector's primary responsibility is to repair damage and reestablish commercial and industrial energy systems as soon as possible.

Organization

- A. The private sector will be relied upon to manage independently until it can no longer do so, or until the health, safety, and welfare of citizens are at risk. The industries will be expected to establish their own emergency plans and procedures and to implement them through their own proprietary systems.
- B. The State Corporation Commission (SCC) is the designated commodity manager for natural gas; see the plan at Attachment
 - 1. The SCC is also the commodity manager for electric power; see Attachment
 - 2. The Department of Mines, Minerals, and Energy (DMME) is the commodity manager for petroleum products and for solid fuels. In the event of a potential or actual shortage situation, the SCC and DMME will, as requested by the Governor and in coordination with the State EOC, implement voluntary conservation measures as appropriate.
- C. Later, if the situation worsens and a "state of emergency" is declared, mandatory conservation measures may be required. The SCC and DMME will then provide technical assistance and staff support to the VEOC as requested.
- D. Following a catastrophic disaster, the VEOC, with staff support from SCC and DMME, will coordinate the provision of emergency power and fuel to affected jurisdictions to support immediate response operations. They will work closely with federal energy officials, other Commonwealth support agencies, and energy suppliers and distributors.

Policies

- Restoration of normal operations at energy facilities is the responsibility of the facility owners.
- ESF #12 maintains lists of energy-centric critical assets and infrastructures, and continuously monitors those resources to identify and correct vulnerabilities to energy facilities.
- ESF #12 addresses significant disruptions in energy supplies for any reason, whether caused by physical disruption of energy transmission and distribution systems, unexpected operational failure of such systems, or unusual economic or political events.
- ESF #12 addresses the impact that damage to an energy system in one geographic region may have on energy supplies, systems, and components in other regions relying on the same system. Consequently, energy supply and transportation problems can be intrastate, interstate, and international.

Concept of Operations

General:

While restoration of normal operations at energy facilities is the primary responsibility of the owners of those facilities, ESF #12 provides the appropriate supplemental assistance and resources to enable restoration in a timely manner.

Collectively, the primary and support agencies that comprise ESF #12:

 Serve as the focal point within the Commonwealth for receipt of information on actual or potential damage to energy supply and distribution systems and

requirements for system design and operations, and on procedures for preparedness, prevention, recovery, and restoration:

- Advise state and local authorities on priorities for energy restoration, assistance, and supply;
- Assist industry and local authorities with requests for emergency response actions as they pertain to energy supplies;
- Assist state and local agencies by locating fuel for transportation, communications, and emergency operations;
- Recommend actions to conserve fuel and electric power; and
- Provide energy supply information and guidance on the conservation and efficient use of energy to state agencies, local governments and to the public.

Specific:

- A. The supply of electric power to customers may be cut off due to either generation capacity shortages and/or transmission/distribution limitations. In recent years, there have been several severe ice storms resulting in downed power lines and widespread and extended power outages. Generation capacity shortfalls are more likely to result from extreme hot weather conditions or disruptions to generation facilities.
- B. Other energy shortages, such as interruptions in the supply of natural gas or other petroleum products for transportation and industrial uses, may result from extreme weather, strikes, international embargoes, disruption of pipeline systems, or terrorism.
- C. The suddenness and devastation of a catastrophic disaster or other significant event can sever key energy lifelines, constraining supply in impacted areas, or in

- areas with supply links to impacted areas, and can also affect transportation, communications, and other lifelines needed for public health and safety. There may be widespread and prolonged electric power failures. Without electric power, communications will be interrupted, traffic signals will not operate, and surface movement will become grid-locked. Such outages may impact public health and safety services, and the movement of petroleum products for transportation and emergency power generation. Thus, a major, prolonged energy systems failure could be very costly and disruptive.
- D. In the wake of such a major disaster, available state-level assets will be used to assist local EOCs with their emergency efforts to provide fuel and power and other essential resources as needed. The priorities for allocation of these assets will be to:
 - 1. Provide for the health and safety of individuals and families affected by the event.
 - 2. Provide sufficient fuel supplies to Commonwealth agencies, emergency response organizations, and service stations in critical areas.
 - 3. Help energy suppliers obtain information, equipment, specialized labor, fuel, and transportation to repair or restore energy systems.
 - 4. Recommend local and state actions to conserve fuel, if needed.
 - 5. Coordinate with local, state, and federal agencies in providing energy emergency information, education, and conservation guidance to the public.
 - 6. Coordinate information with local, state, and federal officials and energy suppliers about available energy supply recovery assistance.

- 7. Provide technical assistance involving energy systems.
- 8. Recommend to the Governor's Office priorities to aid in the restoration of damaged energy systems.
- 9. Process fuel and power assistance requests from local EOCs.
- E. The following plans provide the organizational and conceptual basis for responding to an energy-related emergency. Additional supporting information, such as key contacts, recommended conservation measures, and pre-scripted press releases, can be found in the "Electric Power and Natural Gas Energy Emergency Handbook," maintained by the SCC, and in the "Petroleum and Solid Fuels Energy Emergency Handbook," maintained by DMME.

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Sections - Attachments:

- 1. Virginia Energy Emergency Plan for Natural Gas
- 2. Virginia Energy Emergency Plan for Electric Power
- 3. Virginia Energy Emergency Plan for Petroleum Products
- 4. Virginia Energy Emergency Plan for Solid Fuels (Coal)

Definitions:

- A. <u>Commodity Manager, State</u> Individual or agency responsible for (1) establishing and maintaining liaison with energy industry and government points-of-contact to insure maximum advance warning of an energy resource shortage and (2) coordinating the implementation of federally required energy conservation measures in the event of an energy emergency.
- B. <u>Petroleum Products</u> Motor vehicle gasoline, distillate fuel, aviation fuel, diesel fuel, LP Gas, and residual fuel oil.
- C. <u>Prime Supplier</u> The supplier that makes the first sale of any petroleum product into the distribution system for consumption within the Commonwealth.
- D. <u>Individual Assistance Officer, State</u> Individual or agency responsible for consolidating and providing information to local governments on emergency assistance to individuals and families affected by an emergency or disaster situation through on-going state and federal programs.

Tab A

Virginia Energy Emergency Plan **DUTIES AND RESPONSIBILITIES**

Department of Mines, Minerals, and Energy (DMME):

- Petroleum Products Energy Emergency Plan
- Petroleum Products Energy Emergency Handbook
- Solid Fuels (Coal)

State Corporation Commission (SCC):

- Electric Power Energy Emergency Plan and Program
- Natural Gas Energy Emergency Plan
- Electric Power and Natural Gas Energy Emergency Handbook

Department of Emergency Management (VDEM):

- Commonwealth of Virginia Emergency Operations Plan
- Direction and Control of Emergency Operations
- Implementation of Post-Declaration Conservation Measures
- Post-Declaration Emergency Public Information

Department of Social Services (DSS):

• In response to an emergency situation, identify and, in support their local EOC, provide assistance as needed to families and individuals with emergency-related critical needs.

Tab B

Virginia Energy Emergency Plan **ENERGY EMERGENCY PHASES**

In accordance with federal guidance, the following five emergency response phases have been identified for use in federal and state energy emergency plans:

1. Readiness Phase

Plans and procedures are developed. A network of key contacts in private industry and government agencies is established and maintained.

2. Verification Phase

A potential energy shortage situation has been identified and its potential impact must be evaluated.

3. **Pre-Emergency Phase**

The issue is in the news. There is a full-time emphasis on the part of key players. Plans and procedures are updated. Voluntary conservation measures are considered.

4. Emergency Phase

A "state of emergency" has been declared by the Governor. The VEOC is fully operational and assumes primary implementation responsibilities as directed by the Governor. Additional voluntary and some mandatory conservation measures are considered.

5. Post-Emergency Phase

The "state of emergency" is no longer in effect. Most conditions have returned to normal or stabilized.

Section 1 VIRGINIA ENERGY EMERGENCY PLAN FOR NATURAL GAS

Mission

To assign responsibilities and provide the organization and procedures required to ensure that maximum advance warning will be provided of a potential critical shortage of natural gas; and that in a shortage situation, the distribution and use of available natural gas will be consistent with state priorities of providing for the health, safety, and welfare of the citizens of the Commonwealth.

Organization

The State Corporation Commission is the designated commodity manager for natural gas in the state. Close coordination will be effected with certain federal and state agencies, natural gas suppliers, and distribution companies to monitor the adequacy of the supply and distribution of natural gas. The Governor and other state agencies will be kept informed of the developing situation and of emergency actions required. Coordination with local governments will be effected when necessary. Local gas distribution companies will keep local authorities informed of any potential or actual shortages.

Concept of Operations

- A. The economy of the state and the health and safety of its citizens are heavily dependent upon an adequate and uninterrupted supply of natural gas.
- B. Virginia produces only a small amount of natural gas. Most natural gas must be brought in from outside sources. Four interstate transmission companies supply gas to Virginia.

- C. A variety of circumstances could cause serious statewide or area shortages of natural gas with little advance warning. These include:
 - 1. An extended period of extremely cold weather which would increase demands for natural gas for home, commercial, and industrial heating.
 - 2. Breakdown of compressor stations or pipelines as a result of accidents or sabotage.
 - 3. Unexpected curtailments in interstate pipeline supplies.
- D. In the past, the Federal Energy Regulatory Commission (FERC) made and administered the rules for the equitable allocation of gas at the federal level when the supply is insufficient to meet the demand. In accordance with their authority and based on past experience, it is FERC policy to adjust natural gas curtailments so as to ensure "the protection of deliveries for the residential and small-volume consumers who cannot be curtailed on a daily basis and to require instead reduction in deliveries for large-volume interruptible sales". Assistance and guidance can be obtained from FERC with respect to problems involving interstate gas supplies and other matters pertaining to their authority.
- E. The Federal Department of Energy (DOE) manages all interstate aspects of an energy crisis. In an energy emergency, it will augment VDEM and be prepared for around-the-clock operations. This activity will provide federal interagency coordination, state and local government liaison, and integrate contingency measures. VDEM

- will implement information gathering systems to monitor and forecast national and local natural gas demands and available supplies.
- F. The State Corporation Commission, as the commodity manager for natural gas, will manage available resources within state priorities so that the effects of a shortage will be minimized.
- G. The State Corporation Commission, under the <u>Code of Virginia</u>, has the authority to allocate supplies between distributor companies within the state to protect the public health, safety, and welfare. Also, the State Corporation Commission's "Natural Gas Priorities and Rules" establishes an emergency coordination committee to facilitate transfers of gas between companies operating within Virginia.
- H. The State Corporation Commission's
 "Natural Gas Priorities and Rules" also
 establishes the order in which categories
 of customers can be curtailed when
 supplies are insufficient to serve firm
 requirements. This plan establishes
 curtailment priority classifications for
 all firm customers. Since interruptible
 customers would be the first to be
 curtailed during periods of curtailment,
 interruptible requirements are
 considered to be the lowest priority.
- The Governor may exercise his emergency powers under the Virginia Emergency Management and Disaster Law of 1973, as amended.

J. Tasks

- 1. The State Corporation Commission will:
 - a. Act as the commodity manager for natural gas.
 - b. Monitor natural gas supplies, including establishing alert

- points where increased emergency preparedness would be taken.
- Provide liaison with federal agencies and the natural gas industry to provide the earliest possible warning of shortages.
- d. Develop and maintain priorities and rules for curtailment and allocation procedures.
- e. Develop and maintain priorities and rules for voluntary and mandatory conservation procedures.
- f. Develop and maintain procedures for special hardship appeals of curtailment and conservation procedures.
- g. Assist with the legal interpretations of all orders as requested by the VEOC.
- h. Assist natural gas users to obtain alternate supplies.
- i. Provide guidance to DEM as to the extent of shortages, as a basis of recommending to the Department of Environmental Quality the need to temporarily wave air pollution control regulations to allow industrial boilers and furnaces to switch to less clean, heavy oil products.
- Be prepared to request cooperation from railroads in expediting movement of propane cars, both empty and loaded.
- k. Keep the public fully informed on all matters pertaining to a natural gas shortage.

2. Local government will:

- a. Include measures dealing with a natural gas shortage in their resource plan.
- b. Notify the Department of Social Services when their citizens are unable to purchase natural gas because of a lack of funds.

- c. Request all assistance relating to natural gas supplies from the State Corporation Commission.
- d. Request all other assistance relating to problems caused by natural gas shortages from VDEM.

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Definitions

- A. <u>Natural Gas</u> A naturally occurring mixture of hydrocarbons used for fuel (this consists mainly of methane, CH).
- B. <u>Liquefied Natural Gas (LNG)</u> Natural gas cooled and compressed to form a liquid. It reduces volume nearly 600-fold as it becomes a liquid, thereby making it suitable for storage and long-distance transportation in a container.
- C. <u>Synthetic Natural Gas (SNG)</u> A gas produced from petroleum hydrocarbons which may be substituted for pipeline quality gas.
- D. <u>Firm Customers</u> Service from contracts or schedules under which the seller is expressly obligated to deliver specific volumes and which anticipates no interruptions. Residential service comes under this area.
- E. <u>Interruptible Customers</u> Those customers receiving service based on a contract which allows them to be shut off by the utility after notification. These are usually large commercial and industrial users with alternate fuel capability.
- F. <u>Alternate Fuel Capability (AFC)</u> Gas usage for which the customer has the installed facilities to use an alternate fuel, and gas usage of 10,000 Mcf or more per peak month for which it would be reasonable to install facilities to use an alternate fuel. A customer may be deemed not to have AFC if alternate fuel supplies are unavailable or their use restricted, for reasons beyond the control of the customer, during a gas supply emergency. Any exceptions to the definition of AFC must be approved by the Commission.
- G. <u>Boiler Fuel</u> Usage of gas of 1,500 Mcf or more per peak month for the generation of electricity, production of steam, or heating of water. The only exception shall be for Washington Gas Light Company (including Shenandoah Gas Company). Washington Gas Light Company may define boiler fuel as that industrial usage of gas of 100,000 therms or more per peak month for the generation of electricity, production of steam, or heating of water.
- H. <u>Essential Human Needs Emergency</u> A situation in which gas supply, for whatever reason, is inadequate to meet the requirements of customers in Priorities 1 and 2.
- I. Essential Human Needs Gas usage necessary to maintain service to all residential customers and customers qualifying for human needs requirements without AFC, subject to the following restrictions: (1) thermostats in residences, apartments, sanitariums, rest homes, hospitals, hotels, motels, prisons, and anywhere else that people reside shall be set at 65 degrees during the day and 55 degrees at night, unless such setting causes health hazards, and (2) thermostats in office buildings, retail stores, schools, and other commercial, governmental, and industrial facilities shall be set to the minimum level required to prevent injury to life or property.
- J. <u>Human Needs Requirements</u> Use of gas for residences, critical child care and medical facilities, sanitariums, rest homes, hotels, certain schools, essential agricultural users and food

processing needs, commercial cooking, prisons, plant protection, water and sewage treatment, and electric generating unit startup and flame stabilization.

- K. <u>Plant Protection</u> Minimum usage of gas necessary to prevent physical damage to plant facilities, danger to plant personnel, and to protect material in production. It shall not include gas to maintain ongoing production of materials.
- L. <u>Residential Usage</u> Gas used for normal purposes in maintaining permanent single and multifamily dwellings.
- M. <u>Mcf</u> Standard measure of gas meaning 1,000 cubic feet under standard condition; roughly equals a DTH (dekatherm).

References:

- A. Commonwealth of Virginia, State Corporation Commission, Natural Gas Priorities and Rules.
- B. Tri-State Coordinating Committee on Resource Shortages, Washington Gas Light Company Regional Alert Plan.

Action Checklist – NATURAL GAS

1. Routine Operations

- a. Monitor natural gas supplies at both the national and local levels to be familiar with the state of preparedness of each distribution company and with the overall projected gas supply situation in Virginia.
- b. Review conservation and allocation procedures periodically.
- c. Respond to inquiries regarding gas supply.
- d. Revise and update emergency response plans.
- e. Consider methods and procedures for improving effective curtailment priorities and rules.

2. <u>Increased Readiness</u>

A natural or man-made disaster is threatening some part of the state. A shortage of natural gas is anticipated through information received from gas companies, pipelines, or other sources.

- a. Notify the Department of Emergency Management and other governmental authorities, as necessary, about the scope and duration of the anticipated shortage.
- b. Brief the Governor regarding the anticipated shortage and the conservation and curtailment procedures which are proposed to be taken.
- c. Notify other state public utility companies and federal agencies and, where reasonably possible, coordinate actions with them.
- d. Attempt to obtain additional supplies and redistribute them within the state.
- e. Advise the VEOC when state and local government agencies need to institute conservation procedures.
- f. Advise the Governor and the VEOC concerning public appeals for conservation to industrial, commercial, and residential users. Utilities may want to do this, at least initially.
- g. Coordinate with utility companies to urge the use of alternate fuels to the maximum extent.
- h. See that gas companies maximize the use of emergency facilities, where necessary.

3. Response Operations

a. Mobilization Phase

Conditions continue to worsen requiring full-scale mitigation and preparedness activities. Preliminary steps have not prevented a shortage and emergency actions must be taken. As requested, advise the Governor and the VEOC of the existing conditions and proposed future actions.

b. Emergency Phase

Disaster strikes. An emergency response is required to save lives and protect property.

- 1) Implement actions as necessary and keep the Governor and the VEOC informed.
- 2) Curtailment plans are put into effect. Residential service and human needs are the last to be curtailed (see Tab B).
- 3) Mandatory conservation procedures are put into effect.
- 4) In a severe shortage situation and upon the declaration of a state of emergency, the Governor may allocate or regulate the sale, distribution, and use of all natural gas available within the state. Mandatory conservation measures for residential, governmental, and industrial users may also be instituted as needed.
- 5) When the Governor has exhausted all remedial measures available to him, he will notify the President that a severe natural gas shortage exists. The President may invoke the emergency provisions of Title III of the Natural Gas Policy Act (NGPA), Sections 301 through 304, to ensure that high priority users of natural gas receive an adequate supply to preserve the security of life, health, and property.

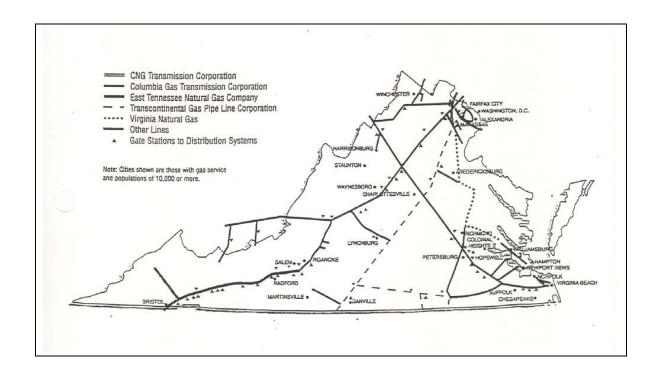
c. Emergency Relief Phase

Assistance is provided to affected individuals and organizations. Stop-gap measures (such as tent cities and potable water trucks) are implemented in order to provide essential services. Preliminary damage assessment surveys are conducted. This phase ends when the locality is no longer in an official state of emergency.

4. Recovery Operations

Essential facilities and services are restored. Displaced persons return to their homes. Federal disaster assistance programs are implemented. "Normal" conditions are restored. Severely damaged structures are rebuilt or demolished and replaced. The damaged parts of the transportation, water, and communications infrastructure are replaced. The economy is restored. The duration of this period may extend for two years or more, depending upon the severity of the disaster.

Figure 1.1: Natural Gas Transmission Lines in Virginia



NATURAL GAS PRIORITIES AND RULES

This plan sets forth the priorities which shall apply whenever any jurisdictional natural gas utility operating in Virginia has insufficient gas available to meet the end-use needs of its customers during a gas supply emergency. An "emergency," as contemplated within these rules, includes, but is not limited to, an unforeseen or unplanned event resulting in a shortage of gas supplies or an inability to deliver gas such that human needs requirements are threatened. When it becomes necessary for any jurisdictional natural gas utility to curtail gas deliveries to its customers during such an emergency, the following priorities will apply beginning with the highest number and proceeding in reverse order to Priority 1. All customers within a priority class, or all customers within any subclass thereof, which is subject to curtailment shall be curtailed to the extent practicable on an equal basis. If a customer's end-use requirements come under two or more priorities, then such requirements must be treated separately when applying this schedule of priorities. Transportation customers will have equivalent end-use priorities as sales customers.

PRIORITIES FOR SERVICE

- **Priority 1:** Customer requirements for residential service and requirements for human needs without alternate fuel capability (AFC).
- **Priority 2:** Customer requirements under 1,500 Mcf per peak month without AFC.
- **Priority 3:** Customer requirements over 1,500 Mcf per peak month without AFC.
- **Priority 4:** Electric generation requirements for essential electric human needs that do not have available supplies of alternate fuels or alternate sources of electricity.
- **Priority 5:** Customer requirements for human needs with AFC.
- **Priority 6:** Requirements of customers with AFC that do not come under any other priority.
- **Priority 7:** Requirements for boiler fuel.

RULES

- A. Each jurisdictional natural gas utility shall develop a plan for curtailment of gas sales which complies with the schedule of priorities and rules adopted herein. To the extent necessary, such plan may provide for subclasses under each of the priority classes. Each curtailment plan shall be filed as a part of the jurisdictional natural gas utility's tariffs.
- B. Each jurisdictional natural gas utility shall be responsible for the administration of its curtailment plan, including the determination of Alternate Fuel Capability (AFC).
- C. Interruptible gas service may be furnished, in management's discretion, as available gas supplies permit. However, the Commission may terminate, or alter, the sale of gas to interruptible customers if it is determined that such sales unreasonably affect the reliability of supplies of gas for priority end-uses.

- D. In the event of an unforeseen emergency of limited duration, each jurisdictional natural gas utility experiencing the emergency shall:
 - 1. Encourage maximum conservation by all customers.
 - 2. Use its own emergency facilities to the limit of their capability.
 - 3. Consider establishing a temporary moratorium against the connection of new customers.
 - 4. If the Commission finds that a jurisdictional natural gas utility cannot supply all of its customers natural gas because an emergency exists, the Commission may, by order, establish a temporary moratorium on the connection of new customers if such moratorium is necessary to minimize the adverse impact on the public health and safety and to facilitate restoration of normal service to all customers at the earliest time practicable.

E. Regional Emergencies

- 1. In the event of regional emergencies, natural gas may be temporarily redistributed among the jurisdictional natural gas utilities operating within the state to assure continued service for essential human needs.
- 2. Transfers of gas will be directed, if necessary, by the Commission pursuant to Section 56-249:1 of the Code of Virginia which reads in pertinent part:
 - The Commission may require a public utility to transfer to another public utility of like business, gas, water, or electricity, whenever the public health, welfare, or safety shall be found to so require; provided, however, that the transferring public utility shall be compensated, at a rate fixed by the Commission, for all such deliveries by the receiving public utility.
- 3. The Commission may direct that customers in certain areas having usage under Priorities 5 and 6 use alternate fuel, even though there is gas available, when such gas is required for public health, welfare, and safety or for higher priority uses in other areas.
- 4. Each jurisdictional natural gas utility shall designate an individual to serve on a coordination committee to facilitate transfers of gas between companies operating within the state. These individuals should be familiar with their respective company's sources of supply and have the authority to make commitments necessary to redistribute available gas supplies.
- 5. The Director of the Commission's Division of Energy Regulation, or his designee, shall be responsible for preparing and maintaining a list of the designated personnel described in rule E.4. and have the authority to call for meetings of the coordination committee to consider requests for assistance. The Director may also invite parties other than gas companies to join the coordination committee.
- 6. In responding to requests for a redistribution of natural gas, the coordination committee will seek to:

- a. Ascertain the extent, nature, and circumstance of the emergency.
- b. Determine which companies operating within the state might be able to assist by a temporary redistribution of some portion of their supplies
- c. Place natural gas utilities requesting assistance into direct communication with companies providing assistance to determine the most effective transfer procedure.
- 7. In the event that emergency assistance is requested of any jurisdictional natural gas utilities operating within the state of Virginia, it shall be the responsibility of the jurisdictional natural gas utility from whom assistance is required to consider carefully the request and use of it's aid as is warranted and possible under the circumstances without jeopardizing the integrity of its own service. As this plan is one of voluntary mutual aid without binding and legal commitment, adherence to this precept is essential to successful implementation.
- 8. The jurisdictional natural gas utility requesting emergency gas and the utility providing such aid shall obtain Commission approval of the price for the emergency gas furnished prior to the actual exchange thereof.
- F. Each jurisdictional natural gas utility shall be authorized to request that transportation customers allow the use of their customer-owned gas to supply higher priority end-usages. Should transportation customers refuse to allow the use of their gas during emergencies and the ability of the gas utility to serve essential human needs is threatened, a jurisdictional natural gas utility shall delay delivery of customer-owned gas and utilize that gas to serve essential human needs when significant relief would be provided by the use of such gas, until such time as the supply threat to essential human needs has been resolved. The natural gas utility shall notify the Commission that it has delayed transportation gas deliveries under this rule without the customer's agreement.
- G. Transportation customers shall be compensated for the use of transportation gas voluntarily supplied or otherwise used in an emergency to assist a jurisdictional natural gas utility. The level of compensation should be determined through negotiation. Compensation should be limited to reasonable costs associated with alternate fuels or the price difference associated with re-supplying gas to the customer. Compensation is not intended to reflect damages that may result from the use of customer-owned gas. Transportation customers or jurisdictional natural gas utilities may request that the State Corporation Commission waive the foregoing compensation limit for the purpose of negotiating contingency emergency supply agreements. Any such agreement must be approved by the Commission. Jurisdictional natural gas utilities may specify the terms of compensation in tariffs, approved pursuant to Virginia Code, Section 56-237 et seq.
- H. Transportation customers receiving gas supplies from a jurisdictional natural gas utility pursuant to the enactment of curtailment priorities shall be charged a rate equivalent to the gas utility's incremental cost of gas, adjusted for unaccounted for losses and gross receipts taxes plus the gas utility's normal transportation rate.
- I. Each jurisdictional natural gas utility shall be authorized to grant exemptions to the priorities and rules adopted herein, and the filed tariffs conforming therewith, for a period not to exceed ten days. Such exemptions shall be granted, in management's discretion, to avoid undue

hardship. A written report of all requests for an exemption and each exemption granted by a jurisdictional natural gas utility shall be filed with the director or a designated member of the Commission's Division of Energy Regulation.

- J. A gas customer or a jurisdictional natural gas utility on behalf of a gas customer, may request of the State Corporation Commission an exception to these rules, for a period of time greater than ten days based on hardship or other justifiable circumstances.
- K. If gas supplies become inadequate to meet the requirements of customers in Priorities 1 and 2, an Essential Human Needs Emergency may be declared and limitations may be imposed restricting gas usage to essential human needs.

Definitions:

- A. <u>Alternate Fuel Capability (AFC)</u> That gas usage for which the customer has the installed facilities to use an alternate fuel, and shall mean that gas usage of 10,000 Mcf, or more, per peak month for which it would be reasonable to install facilities to use an alternate fuel. A customer may be deemed not to have AFC if alternate fuel supplies are unavailable or their use restricted, for reasons beyond the control of the customer, during a gas supply emergency. Any exceptions to the definition of AFC must be approved by the Commission.
- B. <u>Boiler Fuel</u> That usage of gas of 1,500, or more, per peak month for the generation of electricity, production of steam, or heating of water. The only exception shall be for Washington Gas Light Company (including Shenandoah Gas Company). Washington Gas Light Company may define boiler fuel as that industrial usage of gas of 100,000 therms, or more, per peak month for the generation of electricity, production of steam, or heating of water.
- C. <u>Commercial Services</u> Service to customers engaged primarily in the sale of goods or services, to educational institutions, to correctional institutions, and to local, state, and federal government agencies for uses other than those involving manufacturing or electric power generation.
- D. <u>Essential Human Needs Emergency</u> A situation in which gas supply, for whatever reason, is inadequate to meet requirements of customers in Priorities 1 and 2.
- E. <u>Essential Human Needs</u> That gas usage necessary to maintain service to all residential customers and customers qualifying for human needs requirements without AFC, subject to the following restrictions: (1) thermostats in residences, apartments, sanitariums, rest homes, hospitals, hotels, motels, prisons, and anywhere else that people reside shall be set to 650 in the day and 550 at night, unless such setting causes health hazards, and (2) thermostats in office buildings, retail stores, schools, and other commercial government and industrial facilities shall be set to the minimum level required to prevent injury to life or property.
- F. <u>Human Needs Requirement</u> Requirements for residences, critical child care and medical facilities, sanitariums, rest homes, hotels, certain schools, essential agricultural users and food process needs, commercial cooking, prisons, plant protection, water and sewage treatment and electric generating unit start-up and flame stabilization.

- G. <u>Interruptible Service</u> That service provided under interruptible rate schedules or under special interruptible contracts.
- H. <u>Plant Protection</u> That minimum use of gas necessary to prevent physical damage to plant facilities, danger to plant personnel, and to protect material in production. It shall not include gas to maintain ongoing production of materials.
- I. <u>Residential Usage</u> That gas used for normal purposes in maintaining permanent single and multi-family dwellings.
- J. <u>Peak Month</u> Shall remain as presently defined in individual tariffs or past practices of jurisdictional natural gas public utilities; however, for purposes of priority classifications, when a customer's usage is increased, or reduced, on a permanent basis, then the customer shall be moved to the priority consistent with the change in usage.
- K. <u>Electric Generating Start-Up Requirements</u> That usage of gas associated with the start-up of base load generating units including requirements for flame stabilization where alternate start-up fuels are unavailable. It shall not include gas used for co-firing.
- L. <u>Essential Electric Human Needs</u> That electric usage necessary to maintain service to all residential customers and customers qualifying for human needs requirements, subject to the following restrictions: (1) thermostats in residences, apartments, sanitariums, rest homes, hospitals, hotels, motels, prisons, and anywhere else that people reside shall be set to 650 in the day and 550 at night, unless such setting causes health hazards, and (2) thermostats in office buildings, retail stores, schools, and other commercial, government, and industrial facilities shall be set to the minimum level required to prevent injury to life or property. Electric generation will be deemed to be required for essential electric human needs if the electric utility has implemented emergency load reduction procedures at least to the point of shedding non-critical curtailable load.

Administration:

- A. The Director or a designated member of the Commission's Division of Energy Regulation shall be responsible for administering the Schedule of Priorities and Rules adopted herein, subject to review by the Commission as provided by the Commission's Rules of Practice and Procedure.
- B. All written correspondence concerning the foregoing shall be addressed to Natural Gas Priorities and Rules, Attention: Director, Division of Energy Regulation, State Corporation Commission, Post Office Box 1197, Richmond, Virginia, 23209.

Conservation Procedures

The following procedures are steps that should be taken prior to and during curtailments of natural gas. An effective conservation program will lessen the extent of curtailments during an emergency. Public appeals for conservation will be made first by the utilities and by the Governor (VEOC). If necessary, some or all of the actions outlined below can be made mandatory by the Governor under his emergency powers.

A. These measures may be instituted initially to conserve natural gas.

Reduce:

- 1. Public gas lighting to the absolute minimum essential for safety.
- 2. Thermostat settings for comfort heating, utilizing gas, to a maximum of 650 during the day and 500-550 at night.
- 3. The use of hot water heated by gas to minimum requirements.
- 4. Home cooking use to the absolute minimum.
- B. These measures may be instituted when natural gas is in critically short supply.

Discontinue:

- 1. Outside gas lights, except for security and safety purposes.
- 2. All comfort air conditioning (where windows can be opened).
- 3. The use of gas ovens and broilers in home cooking.
- 4. The use of all residential gas equipment, except refrigerators and furnaces.

Section 2 VIRGINIA ENERGY EMERGENCY PLAN FOR ELECTRIC POWER

Mission

To assign responsibilities and provide the organization and procedures required to ensure (1) that maximum advance warning will be provided of any shortage of generating capacity or fuel supply and (2) that in a shortage situation, the distribution and use of available electricity will be consistent with state priorities of providing for the health, safety, and economic wellbeing of the citizens of the Commonwealth.

Organization

The State Corporation Commission is the designated commodity manager for electric power in the state. Close coordination will be affected with federal agencies, other state agencies, and the electric power industry to monitor the adequacy of generating capacity and fuel supplies. The State Corporation Commission will work closely with other state agencies and commodity managers, which have responsibilities relating to electricity or fuels used in generating electricity. It will keep these agencies advised of potential or actual electricity shortages and recognize the interrelationships between one form of energy and another and the probable consequences regarding other energy commodities. The Governor, appropriate state agencies, and emergency ad hoc groups will be informed of the developing situation and of possible emergency actions that may be required.

Concept of Operations

A. There are a total of 36 electric utilities, which provide service to residents of Virginia. This group consists of 5 privately-owned utilities, 13

- cooperatives, and 18 municipals. The electric power, which the cooperatives and municipals distribute, is bought at wholesale from one of seven electric "suppliers" within and outside Virginia. See Tab A for a listing of the suppliers and territories served. Dominion Virginia Power and the Appalachian Power Company (APCO) are the state's two largest electric generating companies and together account for more than 90 percent of electricity sales.
- B. Electricity is produced by using several types of fuel. A shortage of any one of the primary fuels could impact on the availability of other fuels and also could affect the adequacy of supply to electric customers in the Commonwealth.
- C. A variety of circumstances could cause serious statewide or area shortages of electricity with little advance warning.
- D. Capacity deficiency emergencies are usually caused by a failure of some portion of the bulk power system, either at the generating station or in the transmission network. These may be caused by either isolated situations or catastrophic natural disasters.
- E. Fuel shortage emergencies are different in that the available generating equipment is capable of sustaining the system load but the primary fuel is not available. This may be caused by one or more circumstances, which include:
 - 1. An embargo by one or more oil-producing nations.
 - 2. The blockage of waterways by icing or other circumstances.

- 3. International tension, which could curtail ocean shipping.
- 4. Strikes within fuel production or transportation sectors.
- 5. Severe drought, which could curtail hydroelectric generation and reduce water flow for cooling.
- F. A prolonged shortage of electricity could have the following adverse impacts on the state through selective load shedding and enforced conservation measures.
 - 1. Impair the provision of services essential for health and safety.
 - 2. Require reduced hours of operation of all sectors of the economy.
 - 3. Cause unemployment.
 - 4. Reduce travel and tourism.

G. Response Capabilities

- 1. The interconnection of utilities inside and outside of Virginia permits, to a degree, the transfer of power to meet unusual demands either from capacity deficiencies or a localized fuel shortage. The utilities have on file, at the SCC, emergency service restoration plans which respond to capacity deficiency emergencies from natural disasters.
- 2. The power generating companies also have load shedding plans which reduce demand and energy consumption--first by voluntary conservation, then by predetermined selective load shedding (see Tab B).
- 3. Should it become necessary to curtail electricity usage, the utilities in Virginia will implement their

- electric energy emergency conservation plans, which are on file with the State Corporation Commission. These emergency procedures will be put into operation when the public health, safety, and welfare are threatened.
- 4. In a severe shortage situation and upon the declaration of a state of emergency, the Governor may allocate or regulate the sale, distribution, and use of all electricity available within the state.

 Mandatory conservation measures for residential, governmental, commercial, and industrial users may also be instituted as needed.
- H. The State Corporation Commission, as commodity manager for electric power, will regulate the utilities' management of their available resources so that the effects of a shortage will be minimized. There are two general types of electric power emergencies--the capacity deficiency emergency and the fuel supply emergency.

I. Tasks

- 1. State Corporation Commission
 - a. Act as commodity manager for electric power.
 - Monitor utility fuel supplies and reserves, including establishing alert points where increased emergency preparations would be taken.
 - Provide liaison with federal agencies and the electric power industry to provide the earliest possible warning of shortages.
 - d. Monitor power supply and demand during critical periods.

- e. Develop and maintain priorities and rules for curtailment procedures.
- f. In the aftermath of any situation, which damages widespread system infrastructure, the SCC will work with utilities to implement a restoration strategy.
- g. Develop and maintain voluntary and mandatory conservation procedures to be implemented during a shortage (see Tab D).
- h. Develop and maintain procedures for special hardship appeals of curtailment and conservation orders.
- i. Assist with the legal interpretations of all orders as requested by the VEOC.
- j. Keep the public fully informed on all matters pertaining to an electric power shortage.
- 2. Attorney General

The Office of the Attorney General will advise and prepare legal interpretations of all orders issued by the Governor.

- 3. Local Governments
 - a. Include measures dealing with an electricity shortage in their resource plans.
 - b. Notify the state Department of Social Services when their

- citizens are unable to purchase electricity because of a lack of funds, after local resources have been expended.
- c. Request all other assistance relating to an electricity shortage from the state Department of Emergency Management.
- d. Coordinate the implementation of state voluntary and mandatory programs within their jurisdictions.

#

Definitions

- A. <u>Load Shedding</u> The de-energizing of a distribution circuit by the power company to prevent overloading the system. This can be done manually at the various substations, if time permits. In addition, automatic load shedding (under-frequency relaying) is devised so that portions of the load will be dropped at three levels of declining frequency.
- B. <u>Capacity Deficiency</u> A situation wherein the system demand exceeds the utilities' resources.

#

Action Checklist – ELECTRIC POWER

1. Routine Operations

a. Capacity Deficiency Emergency

- 1) Monitor capacity and demand at the state and system levels to forecast possible shortages.
- 2) Review emergency load curtailment procedures for generating companies to ensure consistency with state priorities.
- 3) Review power sharing procedures.
- 4) Prepare draft mandatory conservation orders.
- 5) Review draft appeals for conservation by the public as requested by the VEOC.
- 6) Encourage utilities to develop system restoration and recovery plans.

b. Fuel Supply Emergency

- 1) Monitor fuels supply and reserve levels of all utilities to forecast possible shortages.
- 2) Review curtailment and conservation procedures periodically.
- 3) Prepare draft curtailment and mandatory conservation orders to be issued during a shortage.
- 4) Review draft appeals for conservation by the public as requested by the VEOC.

2. Increased Readiness

a. Capacity Deficiency Emergency

- 1) Notify other state agencies and local governments about the scope and duration of the anticipated problem.
- 2) Brief the Governor on the situation as requested.
- 3) See Tab B for emergency actions to be taken by affected utilities.

b. Fuel Supply Emergency

A shortage of fuel is anticipated, thus causing a shortage of electricity.

- 1) Notify other state agencies and local governments about the scope and duration of the anticipated shortage.
- 2) Notify other state agencies and local governments about the scope and duration of the anticipated problem.
- 3) Brief the Governor on the situation and request approval of recommended conservation and curtailment procedures.
- 4) Attempt to obtain additional fuel supplies and redistribute them within the state.
- 5) Utilize alternate fuels to the maximum extent.
- 6) Recommend public appeals from the Governor for conservation to industrial, commercial, governmental, and residential users.
- 7) Direct the implementation of the Electric Energy Emergency Conservation Plans of those utilities under its jurisdiction.

3. Response Operations

a. Mobilization Phase

Conditions continue to worsen requiring full-scale mitigation and preparedness activities.

b. Emergency Phase

Disaster strikes. An emergency response is required to save lives and protect property. Preliminary steps have not prevented a shortage and emergency actions must be taken.

1) Capacity Deficiency Emergency

- a) Mandatory conservation and load reduction procedures are put into effect by the Governor.
- b) See Tab B for emergency load shedding actions to be taken by affected utilities.
- c) Direct the implementation of the utilities' emergency restoration service plans in response to capacity deficiencies caused by natural disasters.

2) Fuel Supply Emergency

Preliminary steps have not prevented a shortage and emergency actions must be taken.

- a) Mandatory conservation and load reduction procedures are put into effect.
- b) As a last resort, the Governor may declare a state of emergency as a result of a fuel resource shortage and direct implementation of emergency measures authorized by Section 44-146.17 of the Code of Virginia.

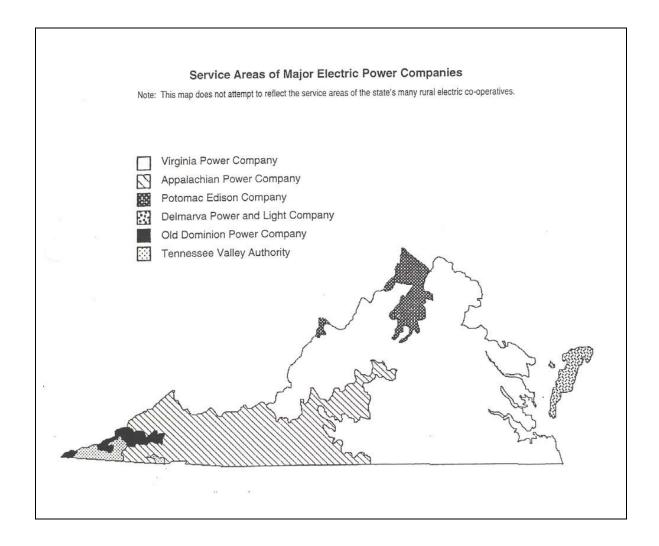
c. Emergency Relief Phase

Assistance is provided to affected individuals and organizations. Stop-gap measures (such as tent cities and potable water trucks) are implemented in order to provide essential services. Preliminary damage assessment surveys are conducted. This phase ends when the locality is no longer in an official state of emergency.

4. Recovery Operations

Essential facilities and services are restored. Displaced persons return to their homes. Federal disaster assistance programs are implemented. "Normal" conditions are restored. Severely damaged structures are rebuilt or demolished and replaced. The damaged parts of the transportation, water, and communications infrastructure are replaced. The economy is restored. The duration of this period may extend for two years or more, depending upon the severity of the disaster.

Figure 2.1: Virginia Electric Suppliers and Territory Served



LOAD SHEDDING PLANS – Summary

These are primarily designed to be implemented in capacity deficiency emergencies requiring a fast drop in load levels to prevent the failure of the system. Each utility has a specific and detailed plan of how to drop portions of its load in order to prevent uncontrolled loss of the system. Below is a summary of Virginia Power's plan.

A. Step I - Voltage Reduction

Distribution circuit voltages are reduced by 5 percent which results in a load reduction of about 1.4 percent under seasonal load conditions.

B. Step II - Voluntary Load Reduction

- 1. Commercial and industrial customers throughout the system are requested to curtail the use of all non-essential electricity. Each district has a list, which is updated each year, of the customers to be called. This has been coordinated with the customers and they are expected to have plans for voluntary load reduction already prepared. It is estimated that a 4 percent summer and a 4.2 percent winter load reduction would be realized.
- 2. Public appeals for voluntary load reduction will be made through the news media. It is estimated that a reduction of 2.5 percent will occur.

C. Step III - Manual Load Shedding

1. Phase A

Load would be dropped by supervisory control from locations remote from the substations involved. About 2.8 percent of the summary peak load and 2.3 percent of the winter peak load can be dropped. This step would only be used in the event of sudden emergencies requiring immediate load reduction. Interruptions to critical customers will be avoided as much as possible. For other emergencies, Phase B will be used.

2. Phase B

This is a manual load shedding plan which provides for orderly load curtailment on a system-wide basis. Should system conditions be such that a capacity deficiency is imminent, switchmen will be stationed at various substations throughout the system. If the deficiency develops, they will then be instructed to open circuit breakers to deenergize various pre-selected distribution circuits. It is scheduled so that no circuit will be de-energized for more than two hours at a time in summer or one hour in winter, after which other distribution circuits will be de-energized on a rotational basis for the duration of the emergency. Interruptions to critical customers, such as hospitals, police and fire facilities, radio and television stations, etc., will be avoided as much as possible. Where such interruptions are unavoidable, however, plans for performing the switching necessary to restore service as quickly as possible to these critical customers have been prepared.

D. Automatic Load Shedding (Under-Frequency Relaying)

The under-frequency load shedding plan is devised so that the load will be dropped at three levels of declining frequency.

PERCENTAGE OF LOAD DROPPED

	<u>Summer</u>	<u>Winter</u>
59.3 cps	17.4%	16.6%
59.0 cps	15.1%	13.1%
58.5 cps	14.6%	<u>13.9%</u>
Total Load Dropped	47.1%	43.6%

CURTAILMENT PROCEDURES

The following procedures are <u>steps that may be taken **during** a shortage of electricity</u>. If voluntary and mandatory conservation actions do not reduce the use of electricity enough, then electricity may be cut off to certain users in order to preserve electricity for higher priority users. All or any combination of the actions outlined below may be taken by the Governor under his emergency powers.

Discontinue the use of electricity, except for the preservation of equipment.

A. Step I

- 1. In all places of amusement.
- 2. In non-essential public places (such as museums, galleries, etc.).
- 3. In schools, on a selective basis.

B. Step II

- 1. In all commercial wholesale and retail establishments, except those engaged in the distribution of controlled temperature storage foods, fuel, medical supplies, and medicines.
- 2. In all office buildings not engaged in communications, utilities, police, fire, health, water supply, public works, welfare, and transportation services.
- 3. In all industrial establishments not engaged in the manufacture, processing, or controlled temperature storage of staple foods, medicines and medical supplies, or other essential facilities specifically designated by the state.

The following are <u>steps that can be **taken prior to** and **during** a shortage of electricity. An effective conservation program will lessen the extent of curtailments during an emergency. Public appeals for conservation will be made first through the news media by the utilities and the Governor. If necessary, some or all of the actions outlined below can be made mandatory by the Governor under his emergency powers.</u>

A. Discontinue:

- 1. All exterior advertising (decorative and flood lighting).
- 2. All show window lighting.
- 3. All interior display and showcase lighting.
- 4. All comfort air conditioning, where health is not affected.

5. The use of all residential electrical appliances, except refrigerators, ranges, and television or radio receivers.

B. Reduce:

- 1. Hours of business to 40 per week, 5 days per week, and 8 consecutive hours per day.
- 2. Elevator service to an absolute minimum.
- 3. Public lighting to the absolute minimum essential for safety.
- 4. Thermostat settings for comfort heating, utilizing electricity, to a maximum of 650 daytime and 500 nighttime temperatures.
- 5. The use of hot water heated by electricity to minimum requirements.
- 6. General illumination by 50 percent in all commercial and residential establishments.
- 7. Electric transportation facility heating by 50 percent.

Section 3 VIRGINIA ENERGY EMERGENCY PLAN For PETROLEUM PRODUCTS

Mission

- A. To provide for the citizens of the Commonwealth in a reasonable and responsible manner when disaster strikes and gasoline, home heating oil, or other petroleum fuel supply systems suddenly fail resulting in a threat to health and safety;
- B. To be capable of immediate collaboration with energy providers to help direct critical supplies to priority locations and restore supply and distribution systems as soon a possible, and (3) to cooperate with the federal government to recommend, encourage, and, under extreme conditions, mandate appropriate conservation measures until market forces can reestablish a working balance between supply and demand.

Organization

The Department of Mines, Minerals and Energy (DMME), as a primary contact within state government for petroleum product emergency management, will communicate with petroleum industry contacts to gather available information about a developing emergency supply and demand situation. (See Tab B.) In the event of an actual shortage, the Commonwealth, in coordination with the U.S. Department of Energy, Office of Energy Emergencies, will communicate with citizens, government, business, and industry to support implementation of needed conservation measures.

Should the petroleum fuel shortage become more severely threatening to the health and safety of citizens, the Department of Emergency Management will activate the State Emergency Operations Center (EOC)

and the Governor will issue a "state of emergency" declaration. (See the Virginia Emergency Services and Disaster Law of 2000, Code of Virginia, §44-146.17(b)(1)). Additional voluntary and perhaps some mandatory conservation measures may be needed. DMME will support the VEOC with contact and resource information as needed.

Depending on the nature of the energy emergency, selected representatives from the private sector will be invited to serve in an advisory capacity in areas where their particular expertise applies.

Concept of Operations

A. Petroleum is widely used throughout Virginia. Transportation is still primarily fueled by petroleum. Other petroleum products are used for space heating, industrial processes, and electric generation. Almost all petroleum products must be brought in from outside sources. Two pipelines carry refined products (gasoline, diesel, and distillate fuels) from the Gulf of Mexico states into Virginia. (See Tab A). Petroleum suppliers in some parts of the state bring in supplies by truck from distribution centers in neighboring states. Suppliers also will bring in supplies by truck from points more remote from Virginia if there are supply shortages in Virginia or neighboring states. Other supplies are brought into Virginia by rail and water transport. One refinery in Yorktown produces petroleum products from crude oil. Local and regional transportation of petroleum products is primarily handled by truck.

Propane is used in Virginia for industrial, agricultural, transportation, and residential uses. A substantial amount of the state's propane supply comes from the terminal at the end of the Dixie Liquefied Petroleum Gas Pipeline in Apex, North Carolina and a pipeline terminal near Clarksburg, West Virginia. There are propane rail terminals near Lynchburg and Winchester, and at private propane distributors' facilities. There is a water terminal for propane in Chesapeake.

- B. A variety of circumstances could cause serious international, national, statewide or area shortages of petroleum products with little advance warning. These include:
 - 1. An embargo by one or more oil-producing nations.
 - 2. International tension that might impact ocean shipping.
 - 3. An extended period of extremely cold weather which would increase demands for refined products for residential, commercial, and industrial heating above forecasted requirements.
 - 4. Production downtime at major refineries.
 - 5. Poor distribution of supplies within oil industry distribution systems. Spot shortages may occur with middle distillates and propane in winter due to inadequate pipeline capacity, pipeline failures, pipeline allocation limits, and surface transportation problems. Spot shortages of gasoline or kerosene may occur due to various problems such as pipeline disruptions or the need to supply multiple products to the marketplace, such as reformulated gasoline, to certain

- areas of the state while supplying other types of gasoline to others.
- C. A significant shortage of petroleum products could have the following adverse impacts on the Commonwealth:
 - 1. Require reduced hours of operation of schools, businesses, and industry.
 - 2. Cause substantial unemployment.
 - 3. Prevent the distribution of essential supplies and the provision of services essential to health and safety.
 - 4. Cause a reduction in the production of electric power.
 - 5. Present a health hazard as a result of cold homes and a shortage of home cooking fuels.
 - 6. Since Virginia's economy relies on a stable supply of gasoline and diesel fuel, a gasoline and diesel fuel shortage could have a serious impact on the economy of the Commonwealth.
- D. This plan relies on a cooperative partnership between government agencies and private industry. DMME will coordinate a network of contacts between industry and government to help to ensure an efficient state response to a petroleum fuel supply shortage or disruption. Information about the network of contacts will be included in the separately published Petroleum Products and Coal Energy Emergency Handbook.
- E. The federal/state strategy for responding to an energy emergency is to:
 - 1. Allow market principles to guide action to the maximum extent possible.

- 2. Implement energy conservation measures to reduce demand as needed and in accordance with federal law (Public Law 94-163 of 1975, Section 362), initially on a voluntary basis and, later, if necessary, on a mandatory basis.
- 3. At the direction of the President, draw down from the federal crude oil stockpiles, but only as a last resort when important national issues are at stake.

F. Information Gathering

DMME will keep a list of petroleum product contacts in the Petroleum Products and Coal Energy Emergency Handbook. These contacts will be contacted during a period of emergency to help to monitor the supply of petroleum products. During a potential or actual energy emergency, monitoring activity would be implemented so that the most appropriate response can be made. DMME also will use information from other sources such as the U.S. Department of Energy, Energy Information Administration, and other state agencies to assess any potential shortage situation. This information may include:

- 1. Information regarding supply disruptions or product shortages.
- 2. Current world oil production compared to prior years production.
- 3. Virginia prices for gasoline, propane, and distillate fuels.
- 4. Spot market prices for petroleum.
- 5. Domestic crude oil and product supply balance.

6. Information from the Virginia
Department of Social Services on
emergency fuel needs for lowincome citizens (Local social
services offices report on families
and individuals needing assistance.)

G. Conservation Measures

- 1. If requested by the U.S. Department of Energy or the Governor, or if conditions warrant DMME can appeal for voluntary conservation measures to stretch the available supplies and to reduce unnecessary petroleum use. Such action must be coordinated in advance with the Governor's Office, through the Office of the Secretary of Commerce and Trade and the VEOC.
- 2. As the situation grows more acute, the Governor may declare "a state of emergency" in order to direct the VEOC to implement additional voluntary and selected mandatory conservation measures.
- 3. As a last resort, the VEOC will recommend to the Governor the implementation of the State Set-Aside Program.
- 4. All strategies shall be coordinated with the U.S. Department of Energy and the governors, energy advisory bodies, and commodity managers of neighboring states and the District of Columbia. The list of these contacts shall be kept in the Petroleum Products and Coal Energy Emergency Handbook.
- 5. In the event of a severe and prolonged shortage, the governor may "control, restrict, allocate, or regulate the use, sale, production, and distribution" of any or all petroleum products within Virginia

in accordance with the § 44.146.17 of the Commonwealth of Virginia Emergency Services and Disaster Law. Mandatory conservation measures for residential, governmental, commercial, and industrial users may also be instituted as needed.

H. Petroleum Products Set Aside Program

Under Virginia's Set-Aside Program, major oil companies will be asked during shortage months to reserve one to three percent of their total supply of gasoline, kerosene, diesel, or No. 2 heating oil for reallocation and delivery to help with essential needs as identified by the Governor. An energy supply emergency is may be a critical reduction in supply either in an area of the state or in the state as a whole.

I. The federal Strategic Petroleum Reserve

The federal Strategic Petroleum Reserve will be released only under extreme circumstances when important national issues are at stake. This action is under federal control.

- J. Duties and Responsibilities
 - 1. Department of Mines, Minerals, and Energy. DMME's goal is to assist the marketplace in distribution of petroleum products. In doing so, it will take the following actions:
 - a. In the event of a shortage:
 - Receive requests from fuel oil suppliers, transporters, or trade associations to implement vehicle weight and driver hours of service waivers. Communicate these requests to DEM, who will coordinate implementation of the

- waivers VDOT, the State Police, and the federal government, and communicate news about the issuance of these waivers to the petroleum distribution industry.
- 2) Coordinate with trade associations to share information and prepare needs assessments.
- Maintain current contact information with the petroleum product and propane distribution and delivery industry. Renew contacts with key contacts annually or more often as needed – with:
 - 1) Virginia Petroleum Council
 - 2) Virginia Petroleum Marketers and Convenience Store Association
 - 3) Virginia Gasoline Marketers Council
 - 4) Virginia Propane Gas Association
 - 5) Colonial Pipeline and Plantation Pipeline companies
 - 6) Virginia Trucking Association
- Provide data regarding supplies and use of petroleum products obtained from:
 - U.S. Department of Energy, Energy Information Administration, http://www.eia.doe.gov.

- Virginia Energy Patterns and Trends, http://www.energy.vt.edu/v ept.
- 3) Other Internet sources.
- d. Coordinate regional contacts.
 Renew contacts with key
 contacts annually or more often
 as needed.
 - 1) DOE Region III Philadelphia Support Office
 - Neighboring States District of Columbia,
 Maryland, West Virginia,
 Kentucky, Tennessee, North
 Carolina
 - 3) Metro DC Council of Governments
- e. Maintain a key contacts list and ready-to-go guidance materials to assist State government facility managers respond to a petroleum products energy emergency. Renew contacts with key contacts annually or more often as needed.
- f. Be prepared to advise the Governor during an energy emergency. The Governor will direct conservation measures and other actions, usually as recommended by federal guidance, through the DMME or, in the event of a "state of emergency" declaration, through the VEOC.
- g. Maintain the Commonwealth Energy Emergency Plan in coordination with the VDEM.
- h. Develop and maintain the Petroleum Products and Coal

- Energy Emergency Handbook, to include key contacts in government and industry, ready-to-go press releases, and other guidance materials for implementing voluntary and mandatory conservation measures.
- Assist and provide technical expertise as needed to the Office of the Secretary of Commerce and Trade and to the VEOC during an energy emergency.
- j. After an event, work with VDEM to prepare an after action report summarizing lessons learned and recommending improvements. Submit for approval to the Secretaries of Commerce and Trade and Public Safety. Coordinate the revision of plans and procedures accordingly.
- 2. Department of Emergency Management (VDEM)
 - a. Implement voluntary and mandatory energy conservation measures once the Governor has declared a "state of emergency."
 - b. Coordinate with DMME to include the Commonwealth Energy Emergency Plan in the State EOP.
- 3. State Corporation Commission

Act as the interstate pipeline agent and coordinate with pipeline companies, other states and Federal/State emergency agencies regarding product disruptions resulting from pipeline distribution system failures. As pipeline agent, the SCC shall be the clearinghouse on communications with pipeline

emergency and the current condition of the pipeline.

4. Department of Social Services (DSS)

Local DSS offices will gather reports they receive from families and individuals needing assistance in response to a home heating oil shortage or other energy emergency situation where individual assistance or mass care services may be required. The local DSS offices will communicate these needs to their local EOCs and the state Department of Social Services.

5. Local Governments

- a. Include measures dealing with a petroleum product shortage in their energy plan.
- b. Notify DMME and the VEOC when their citizens are unable to obtain petroleum products from local dealers.
- c. Request all other assistance relating to petroleum product shortages from the VEOC.
- d. Be prepared to provide mass care in heated buildings for citizens who are temporarily without home heating fuels.
- e. Coordinate the implementation of state voluntary and mandatory conservation and emergency management programs within their jurisdictions.

Definitions

A. Distillate Fuel

1. No. 2, and No. 4 Fuel Oil

The state set-aside program would include at least No. 2 heating oil (primary home heating fuel) in a shortage situation.

2. Kerosene and No. 1 Fuel Oil

The primary use of this fuel is for home heating. Most users of kerosene for home heating have very limited storage facilities and tend to have limited financial resources. These factors make any shortage of kerosene a serious one for these users. The state set-aside program would include kerosene in a shortage situation.

B. <u>Liquefied Petroleum Gas (LP Gas)</u>, <u>Propane</u>, <u>Butane</u>

A gas produced from petroleum hydrocarbons. Propane and butane are the most common forms of LP Gas. Propane is used as a substitute for natural gas in rural homes for heat, cooking, and power, in light industry as a process gas, in light vehicles, for gas logs, and for home barbecues. Most of the propane used in Virginia enters the state by rail and truck from pipeline terminals in other states. Difficulties in obtaining adequate supplies may stem from a natural gas shortage or transportation bottleneck.

C. Residual Fuel Oil

No. 5 and No. 6 (Bunker C) fuel oil that remains after distillation of a crude oil to obtain lighter components. This is used by utilities and industry for power generation or process steam. There are no distributors in Virginia. The users bring this product into the state for their own use. A shortage situation could force a conversion to other fuels and strict conservation until new supply sources could be found.

D. Petroleum Products

References

- A. Public Law 94-163 of 1975, Section 362.
- B. Commonwealth of Virginia Emergency Services and Disaster Law of 2000, as amended.

Action Checklist - PETROLEUM

1. Readiness Phase

Plans and procedures are developed. Formal and informal communications are established by DMME with private industry and public agencies with key energy emergency roles and responsibilities so that plans can be coordinated in advance and the early indications of a potential energy shortage can be effectively communicated.

DMME will:

- a. Maintain the Virginia Energy Emergency Plan for Petroleum Products, in coordination with VDEM.
- b. Develop and maintain the Petroleum Products and Coal Energy Emergency Handbook to include key contacts in government and the private sector, ready-to-go press releases, and other guidance materials for implementing voluntary and mandatory conservation measures.
- c. Develop and maintain industry and government contacts who may help track the Commonwealth's petroleum supply and use during an energy emergency situation.
- d. Review annually, plans and procedures that assist with maintaining the Commonwealth's capability to respond appropriately to a petroleum products energy emergency.

2. Verification Phase

A potential energy shortage situation has been identified and its potential impact must be evaluated.

DMME will:

- a. Receive reports from industry points of contact on petroleum prices, storage levels, transportation problems, and consumption patterns.
- b. Review and update plans and procedures as needed.
- c. Report to the Office of the Secretary of Commerce and Trade and to the VEOC as needed to keep them informed. Also provide a report to the Department of Social Services (DSS) in the event of a home heating oil or propane shortage situation.

3. **Pre-Emergency Phase**

<u>Involves an increase in public and private activity</u>. The issue is likely to be in the news. If necessary, DMME will coordinate a meeting of key players to review the situation. If conditions warrant, they may recommend, and the Governor may implement, voluntary conservation measures, usually in conjunction with federal guidance and the same measures being implemented simultaneously in other states. Preparations are made to implement additional voluntary and mandatory conservation measures should the situation worsen.

DMME will:

- a. Continue monitoring petroleum prices, storage levels, transportation, and consumption patterns through contact with petroleum product trade associations.
 Receive from petroleum product trade associations and communicate to the VDEM requests for exemptions to vehicle weight and driver hour limits.
- b. Establish formal communications with the U.S. Department of Energy and counterpart energy emergency agencies in contiguous or regional states.
- c. Review and update plans and procedures as needed.
- d. Receive reports about the state of readiness of petroleum supplies through contact with petroleum product and related trade associations and the State Corporation Commission.
- e. Provide updates to the Office of the Secretary of Commerce and Trade, the DSS, and to the VEOC as needed to keep them informed.
- f. Make recommendations as necessary and in coordination with the Office of the Secretary of Commerce and Trade.
- g. As appropriate and with approval from the Governor's Office, begin to provide guidance for, and encourage the implementation of, voluntary conservation measures, using previously prepared press releases and fact sheets from the Petroleum Products and Coal Energy Emergency Handbook.

- a. Prepare a draft, event-specific "state of emergency" declaration for the Governor. Prepare to activate the VERT.
- b. Coordinate with the Office of the Secretary of Commerce and Trade, DSS, and DMME in order to be prepared to assume primary public information duties once an emergency has been declared. Prepare draft news releases and an event-specific distribution list. Begin to post need-to-know information on the VDEM web site, www.vaemergency.com. (See the Petroleum Products and Coal Energy Emergency Handbook.)
- c. Coordinate issuance of exemptions to vehicle weight and driver hour limits with VDOT, the State Police, and federal government agencies.
- d. Prepare to activate the State Petroleum Set Aside Program.
- e. Identify an event-specific advisory group. Assure that all members are available 24-hours-a-day throughout the pre-emergency and emergency phases. Provide for administrative staff support as needed.

f. Keep members of the advisory group and other key players, such as DMME, the Office of the Secretary of Commerce and Trade and the VEOC, informed through conference calls and other means as appropriate.

4. Emergency Phase

A "state of emergency" declaration is issued by the Governor. The VEOC is fully operational. Voluntary conservation measures may be expanded and mandatory ones implemented through an Executive Order from the Governor.

DMME will:

- a. Continue the monitoring of petroleum prices, storage levels, transportation, and consumption patterns through contact with petroleum product trade associations and the State Corporation Commission (SCC). Continue to receive from petroleum product trade associations and communicate to the VDEM requests for exemptions to vehicle weight and driver hour limits.
- b. Continue formal communications with the U.S. Department of Energy and counterpart energy emergency agencies in contiguous or regional states.
- c. Continue to evaluate the state of readiness of petroleum suppliers and major users. Monitor critical data pertaining to energy needs of hospitals, local public safety agencies, major transportation providers, etc. through contact with petroleum product trade associations.
- d. In coordination with the Office of the Secretary of Commerce and Trade, the SCC, and DSS, assist the VEOC with the preparation of an official daily situation report to the Governor. Copies will be provided by the EOC to other interested parties, to include the U.S. Department of Energy and the Federal Emergency Management Agency (FEMA).
- e. Assist the VEOC with providing guidance for additional voluntary, and the beginning of mandatory, conservation measures. Such guidance will be pre-scripted in the Petroleum Products and Coal Energy Emergency Handbook.
- f. Continue to make recommendations as needed, in coordination with the Office of Secretary of Commerce and Trade.
- g. Provide available information to key players through conference calls and other means as appropriate.

- a. Submit and obtain approval of the event-specific "state of emergency" declaration from the Governor. Activate the VERT.
- b. Continue to coordinate issuance of exemptions to vehicle weight and driver hour limits with VDOT, the State Police, and federal government agencies.

- c. Assume primary public information duties from DMME. As approved by the Office of the Secretary of Commerce and Trade and with assistance from DSS and DMME, prepare and send out energy conservation directives from the Governor's Office. Coordinate the requests for conservation measures with the federal government and other affected states based on federal directives or guidance and the corresponding activities of the other affected states. Provide news releases as needed and, if necessary, establish an information hotline. Continue to post the daily situation report and other need-to-know information on the VDEM web site.
- d. Coordinate with the Department of Social Services, the Virginia Department of Transportation, the Virginia State Police, the State Corporation Commission, the Department of Agriculture and Consumer Services, and other state agencies as needed to evaluate and implement conservation measures.
- e. In accordance with established procedures for all emergency declarations, receive a daily situation report from each local EOC advising the VEOC of any local problems and official requests for assistance. In the event of a home heating oil shortage, local EOCs, in coordination with their local office of the Department of Social Services, must include information about persons needing assistance.
- f. Coordinate with each local EOC to implement conservation measures and to assist with the provision of individual assistance as needed.
- g. If necessary, activate the Petroleum Set Aside Program.
- h. If appropriate, request that the President issue a directive to draw down the U.S. Strategic Petroleum Reserve.

State Corporation Commission (SCC) will:

- a. Communicate with pipeline companies, other states, and Federal emergency agencies regarding product disruptions resulting from pipeline distribution system failures.
- b. Provide information on the nature and severity of the disruption and assist VDEM and DMME in providing response recommendations.
- c. Assist VDEM with information for the Governor's office regarding details of the emergency.

Department of Social Services (DSS) will:

- a. Assist with the organization and activities of each local Disaster Recovery Task Force.
- b. In the event of a home heating oil shortage emergency, each local DSS office will gather reports from families and individuals needing assistance. Submit need-to-know information to the local EOC, which will in turn submit it to the VEOC. Also provide a copy of this information to the DSS Commissioner's Office in Richmond.
- c. Assist the DEM with development and dissemination of conservation directives.

Localities will:

- a. Notify the Department of Social Services when their citizens are unable to purchase fuel oil because of lack of funds.
- b. Request assistance from the Department of Emergency Management.
- Provide assistance to affected individuals and organizations. Implement stopgap
 measures (such as opening emergency shelters) in order to provide essential services.
 Conduct preliminary damage assessment surveys.
- d. Coordinate the implementation of state voluntary and mandatory conservation and emergency management programs within their jurisdictions.

5. Post-Emergency Phase

The "state of emergency" declaration is no longer in effect. The petroleum based product shortage no longer constitutes a threat to public health and safety. Most conditions have returned to normal or have been stabilized.

DMME will:

- a. Request and receive an after action report from all key organization participants.
- b. With VDEM, prepare and submit an after action report to the Office of the Secretary of Commerce and Trade.
- c. Assist VDEM, if necessary, with a special post-event meeting to direct needed corrective actions and improvements to plans and procedures based on lessons-learned.
- d. Return to the readiness phase. Revise plans and procedures as needed.

- a. Prepare and submit an after action report to the Secretary of Public Safety.
- b. Prepare a separate internal after action report to capture lessons learned about VEOC operations. Include input form localities about the state-local interface.
- c. Conduct, if necessary, a special post-event meeting to direct needed corrective actions and improvements to plans and procedures based on lessons-learned.
- d. After a return to normal, coordinate with DMME to update the State EOP/Commonwealth Energy Emergency Plan.

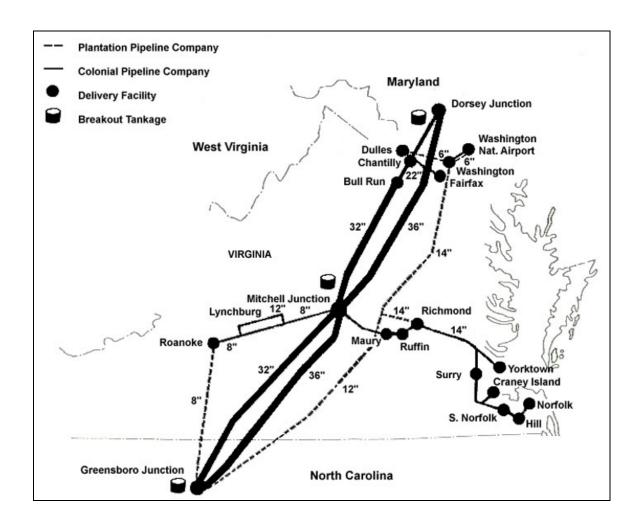


Figure 3.1: Map of Major Petroleum Product Pipelines

Source:

• Colonial Pipeline Company and Plantation Pipeline Company

Monitoring Procedures – PETROLEUM PRODUCT

In the event that a shortage of any fuel appears possible in the near future, the Department of Mines, Minerals and Energy (DMME) will institute monitoring activities for petroleum products, primarily gasoline and other distillate fuel. DMME in conjunction with the VEOC will:

- A. Establish regular telephone communications with Virginia's petroleum product trade associations. The object of these contacts will be to receive advance notice of jobber and dealer difficulties in obtaining supplies.
- B. Establish contact with SCC in order to receive and share information regarding interstate pipeline distribution system disruptions and emergencies. The SCC will communicate with officials of the Colonial and Plantation Pipeline Companies on situations where actual or prospective failures may impact established delivery schedules and allocations of pipeline space.
- C. Analyze the petroleum supply situation and brief the Coordinator of Emergency Management whenever a significant change appears to have occurred.
- D. Contact the major oil companies through the Virginia Petroleum Council and request their cooperation and assistance in bringing additional fuel into the state as needed.
- E. Keep utilities informed through the SCC of developments in the situation to facilitate provisions for assistance from them.
- F. Keep abreast of the principal transportation bottlenecks reported by the oil companies and jobbers.

Note: For additional information, reference the *Petroleum Products and Coal Energy Emergency Handbook*.

PETROLEUM PRODUCTS SET-ASIDE PROGRAM

Under Virginia's Set-Aside Program, four petroleum products will be set aside by major oil companies upon direction of the VEOC: gasoline, kerosene, diesel, and No. 2 heating oil.

The procedures will be activated in the event that a petroleum products shortage results in a reduction in supply of ten percent or more, either in an area of the Commonwealth or in the Commonwealth as a whole. The VEOC would direct the major oil companies to hold in reserve a small percentage (one to three percent) of their total supply of petroleum products for Virginia during the shortage months. The VEOC would then determine the volumes of releases and the manner of distribution depending upon the severity of the shortage and the extent of the shortage geographically.

Section 4

VIRGINIA ENERGY EMERGENCY PLAN For SOLID FUELS (COAL)

Mission

- A. To provide for the citizens of the Commonwealth in a reasonable and responsible manner when disaster strikes and solid fuel supply systems suddenly fail resulting in a threat to health and safety;
- B. To be capable of immediate collaboration with energy providers to help restore supply and distribution systems as soon a possible, and
- C. To cooperate with the federal government to recommend, encourage, and, under extreme conditions, mandate appropriate measures until market forces can reestablish a working balance between supply and demand, maintain the economic viability of the state and provide for the health, safety, and wellbeing of its citizens.

Organization

The Department of Mines, Minerals and Energy (DMME) serves as the commodity manager for coal. Procedures will be established to receive information from coal users about potential or actual coal shortages in a timely manner, and in coordination with the VEOC, to rapidly cope with these shortages. Coordination will be effected with federal and other state agencies, manufacturer, utility, transportation and coal trade associations or companies, and the State Corporation Commission to identify developing coal supply or distribution problems. DMME will make recommendations to the VEOC who will work closely with other state agencies and

commodity managers which have coal-related responsibilities keeping them advised of potential or actual coal shortages. Prior to making decisions or recommending specific courses of action regarding coal, the impact and consequences on other energy resources should be considered. The VEOC will keep the Governor, through the Secretaries of Commerce and Trade and Public Safety, informed of impending shortages and will make recommendations with respect to emergency measures.

Depending on the nature of the energy emergency, selected representatives from the private sector will be invited to serve in an advisory capacity in areas where their particular expertise applies.

Concept of Operations

- A. Virginia produces about 33 million tons of coal annually or approximately three percent of the nation's total. The majority of Virginia coal is transported by rail with a lesser amount transported by truck. Coal is primarily used in electric power generation, coke manufacture, and industrial process uses, or is exported.
- B. Most Virginia electric generating utilities and some independent power producers use coal. These plants normally stockpile between 60-90 days of coal supplies. A shortage of coal will result in the need to implement electric power conservation programs initially and more stringent control measures later as coal stocks are reduced. See the

Virginia Energy Emergency Plan for Electricity, Attachment 1.

- C. There are a number of coal-burning industries in Virginia. Individual industrial companies normally stockpile about a 30-day supply of coal. A prolonged coal supply or railroad disruption would rapidly deplete available coal stocks and potentially result in increased unemployment. This could also result in an increased reliance on liquid fuels and transport by truck, which could lead to increased energy cost.
- D. A number of low-income citizens rely on coal for home heating and cooking purposes; and in many instances, supplies are purchased to meet requirements on a regular basis. Coal dealers and retailers who supply lump coal for home use stock limited amounts. A lengthy rail or coal supply disruption or a prolonged period of extreme cold weather could deplete coal supply for home use and result in cold homes and frozen plumbing among lowincome families. Relief organizations at the local level, under centralized direction, would need to assist needy families.
- E. In the event of a local emergency arising out of a coal shortage, a local governing body may petition the Governor to declare a local emergency to exist in their political subdivision. Local governments, working with coal dealers, can influence the distribution of available coal supplies to needy families through fuel assistance programs.
- F. If coal shortages are likely to occur, DMME, in cooperation with the VEOC, will coordinate with industry and utility representatives and the State Corporation Commission to recommend how best to resolve any shortages of coal.

G. Tasks

- Department of Mines, Minerals and Energy (DMME).During periods of potential or actual coal shortages, DMME will:
 - a. Receive and review reports submitted by the State Corporation Commission, major industries which use coal, coal dealers, and local government regarding impending coal shortages.
 - Keep the VEOC and state agencies informed as necessary about the status of coal in the state when potential or actual shortages exist.
 - c. Keep information resources available so the public may be fully informed on matters pertaining to a coal shortage.
- 2. Department of Emergency Management (VDEM)
 - a. Staff and operate the VEOC to implement conservation measures, emergency rationing or allocation of coal supplies, or other control measures as needed in the event of a coal shortage.
 - b. Coordinate with DMME to maintain the solid fuel (coal) part of the COVEOP.
- 3. State Corporation Commission (SCC). When coal shortages are imminent, the State Corporation Commission will:
 - a. Keep DMME and the VEOC informed on the status of coal

supplies held by electric utilities serving the state.

- b. Implement measures under the Virginia Energy Emergency Plan for Electricity, Attachment 1, that affect coal consumption at electrical power plants.
- c. Coordinate actions affecting coal with DMME and the VEOC.

4. Local Governments

- a. Include measures dealing with a coal shortage in their energy plan.
- b. Notify DMME and the VEOC when their citizens are unable to obtain coal from local dealers.
- Notify the Department of Social Services when their citizens are unable to purchase coal because of a lack of funds.
- d. Request all other assistance relating to coal shortages from the VEOC.
- e. Be prepared to provide mass care in heated buildings for citizens who are temporarily without home heating fuels.
- f. Coordinate the implementation of state voluntary and mandatory conservation and emergency management programs within their jurisdictions.
- 5. Department of Social Services

Local DSS offices will gather reports they receive from families and individuals needing assistance in response to a coal shortage or other solid fuel emergency situation where individual assistance or mass care services may be required. The local DSS offices will communicate these needs to their local EOCs and the state Department of Social Services.

6. Department of Rail and Public Transportation

When rail shipments of coal are disrupted, DRPT will contact rail carriers to identify causes of the transportation problems and implement plans to provide necessary supplies to critical coal burning facilities such as utility and non-utility electric generating plants.

ACTION CHECKLIST - SOLID FUELS (COAL)

1. Readiness Phase

Plans and procedures are developed. Formal and informal communications are established by DMME with private industry and public agencies with key energy emergency roles and responsibilities so that plans can be coordinated in advance and the early indications of a potential energy shortage can be effectively communicated.

DMME will:

- a. Develop contact listings of manufacturer, transportation and coal trade associations and companies who are aware of normal storage capacities and distribution systems.
- b. Maintain liaison with the U. S. Department of Energy (DOE).
- c. Maintain, in coordination with VDEM, the solid fuel (coal) part of the State EOP.

2. Verification Phase

A potential energy shortage situation has been identified and its potential impact must be evaluated.

DMME will:

- a. Implement monitoring activities through contact with appropriate trade associations, the SCC and industry representatives.
- b. Notify agencies that have tasking responsibilities of the potential emergency.
- c. Advise the Secretary of Commerce and Trade and the VDEM of existing conditions and recommended emergency response actions.

3. **Pre-Emergency Phase**

Conditions continue to worsen requiring full-scale mitigation and preparedness activities. Preliminary steps have not prevented a shortage and emergency actions must be taken.

- a. Coordinate the implementation of voluntary or mandatory conservation measures or other emergency response actions as approved by the Governor. Mandatory actions will be implemented only when the Governor has declared a state of emergency to exist as a result of a resource shortage.
- b. Work closely with the DMME, the State Corporation Commission, the Department of Rail and Public Transportation, other state agencies, and local governments in implementing this plan.
- c. Seek assistance from the federal Department of Energy and other federal agencies requesting that they implement those measures within their jurisdiction that will help to ameliorate the coal shortage.

d. Implement a public information program to apprise the citizens of existing conditions with regard to coal shortages and seek their cooperation and support. As part of this process, energy conservation publications will be made available to the public.

4. Emergency Phase

Conditions worsen and shortages of coal impair ability to ensure protection of life, health, safety and property. The Governor declares a state of emergency as a result of a coal resource shortage and directs implementation of selected mandatory conservation measures in coordination with actions under the Emergency Operations Plan for Electricity. The Governor may allocate or regulate the sale, distribution, and use of all coal available within the state. Mandatory conservation measures for residential, governmental, commercial, and industrial users may also be instituted as needed.

a. VDEM will:

- 1) Submit and obtain approval of the event-specific "state of emergency" declaration from the Governor. Activate the VERT.
- 2) Assume primary public information duties from DMME and the State Corporation Commission. As approved by the Office of the Secretary of Commerce and Trade and with assistance from the SCC and DMME, prepare and send out energy conservation directives from the Governor's Office. Provide news releases as needed and, if necessary, establish an information hotline. Continue to post the daily situation report and other need-to-know information on the VDEM web site.
- 3) Based on federal directives or guidance and the corresponding activities of other affected states, recommend voluntary and mandatory conservation measures as appropriate to the Governor's Office through the Secretary of Commerce and Trade. Reference the Petroleum Products and Coal Energy Emergency Handbook and other sources.
- 4) Coordinate with the Department of Social Services, the Virginia Department of Transportation, the Virginia State Police, the State Corporation Commission, the Department of General Services, and other state agencies as needed to evaluate and implement conservation measures.
- 5) In accordance with established procedures for all emergency declarations, receive a daily situation report from each local EOC advising the VEOC of any local problems and official requests for assistance. In the event of a home solid fuel shortage, local EOCs, in coordination with their local office of the Department of Social Services, must include information about persons needing assistance.
- 6) Coordinate with each local EOC to implement conservation measures and to assist with the provision of individual assistance as needed.

b. Localities will:

1) Notify the Department of Social Services when their citizens are unable to purchase coal because of lack of funds.

- 2) Request assistance from the Department of Emergency Management.
- 3) Provide assistance to affected individuals and organizations. Implement stopgap measures (such as opening emergency shelters) in order to provide essential services. Conduct preliminary damage assessment surveys.
- 4) Coordinate the implementation of state voluntary and mandatory conservation and emergency management programs within their jurisdictions.

5. Post-Emergency Phase

Essential facilities and services are restored. Displaced persons return to their homes. Federal disaster assistance programs are implemented. "Normal" conditions are restored. Severely damaged structures are rebuilt or demolished and replaced. The damaged parts of the transportation, water, and communications infrastructure are replaced. The economy is restored.

a. DMME will:

- 1) Request and receive an after action report from all key participants.
- 2) With VDEM, prepare and submit an after action report to the Offices of the Secretary of Commerce and Trade and Public Safety.
- Assist VDEM, if necessary, with a special post-event meeting to direct needed corrective actions and improvements to plans and procedures based on lessonslearned.
- 4) Return to the readiness phase. Revise plans and procedures as needed.

b. VDEM will:

- 1) With DMME, prepare and submit an after action report to the Offices of the Secretary of Commerce and Trade and Public Safety.
- 2) Prepare a separate internal after action report to capture lessons learned about VEOC operations. Include input form localities about the state-local interface.
- 3) Conduct, if necessary, a special post-event meeting to direct needed corrective actions and improvements to plans and procedures based on lessons-learned.
- 4) After a return to normal, coordinate with DMME to update the State EOP/Commonwealth Energy Emergency Plan.

COAL MONITORING PROCEDURES

Sources of information that would provide early warning of a potential or actual coal shortage in the Commonwealth:

A. State Corporation Commission (SCC)

During periods of threatened coal shortages, the SCC will provide the DMME with information regarding reductions in the normal coal supply of electric utilities.

B. Major Industries

Trade associations representing major coal-burning industries and independent power producers in the state will be requested to report to DMME significant reductions of their members' coal stocks and their inability to replenish their coal stocks.

C. Local Governments

The local coordinators of emergency services will be asked to develop emergency management of resources plans for their political subdivisions. Included in their plans will be a requirement to notify the DSS when their citizens are unable to obtain coal from local dealers for heating or cooking purposes.